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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,741	05/16/2001	Samuel D. Conzone	BKRAM-1 P1	9034

23599 7590 10/02/2002

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EXAMINER

ASSAF, FAYEZ G

ART UNIT PAPER NUMBER

2872

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,741

Applicant(s)

CONZONE ET AL.

Examiner

Fayez G. Assaf

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8, 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Meissner (US 5,846,638).

Regarding claims 1-3 and 5, Meisser discloses a photonic device comprising, a first section (317 bottom in Fig. 3c) including a material adapted to interact with photons, a second section (317 top in Fig. 3c) including a material adapted to interact with photons, with an area of the first section and an area of the second section abutting each other (see Fig. 3), characterized in that at least a part of the first area and a part of the second area define a low temperature bonding area (line 49 to line 67 of Col. 12), mechanically or optically connected.

Regarding claim 4, Meissner discloses the device comprising one ore more interaction types of the group of interactions

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consisting of transmission of photons, reflection of photons, absorption of photons, generation of photons, emission of photons, wavelength conversion of photons, guiding of photons, diffraction of photons, refraction of photons, superimposing photons, generation of photon interference and linear, elliptic and circular polarization of photons (line 66 of Col. 15).

Regarding claim 6, Meissner discloses the device comprising block of glass with a waveguide and the second section comprising an optical fiber (line 35 to line 44, Fig. 3).

Regarding claims 7-14, Meissner discloses the first material having at least a portion where an index of refraction being different from an index of refraction of at least a portion of said second material, wherein the photonic device is a wave guide defined in a surface area of the first material and the waveguide being covered by said second material, and wherein an essentially two-dimensional optical chip is defined with waveguides connecting active and passive optical components (line 65 of Col. 15 to line 44 of Col. 16).

The Examiner notes that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meissner in view of Official Notice.

Meissner discloses the claimed invention including an explicit teaching that many combinations of waveguide structures are conceivable for specific electro-optical devices (line 38 to line 42 of Col. 14). It is this teaching, in essence, enables and artisan of practicing devices such as splitters, interferometers, modulators, or any combination thereof. The optical devices, which are recited in the instant application, claims 15-50, are conventional and well known.

It would have been obvious, at the time the invention was made to realize such optical devices by utilizing the teachings of Meissner so as obtain effect free bonds between different

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optical elements in an optical device (see Abstract, claims 1 and 4).

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fayez Assaf whose telephone number is (703) 306-5526. The fax number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Fayez Assaf

9/30/02



Cassandra Spyrou
Supervisory Patent Examiner
Technology Center 2800